Natural Gas Quality Standards Workshop February 17-18, 2005 Agenda

February 17

10 a.m. Welcoming Remarks and Introductions — Commissioners

Overview of State Agencies' Roles and Responsibilities

Dave Maul, California Energy Commission, Facilitator and others

10:15 a.m. Panel 1 — Current Gas Quality Standards and Specifications

Lee Stewart, Sempra Utilities

Joe Bronner, Pacific Gas and Electric Company (PG&E)

Joe Sparano and John Martini, California Independent Petroleum Association (CIPA) and Western States Petroleum Association (WSPA)

Gary Yee, California Air Resources Board (CARB)

David Rue/William Liss, Gas Technology Institute (GTI)

Topics to be addressed by Panel 1:

Summary of Current California Standards & Specifications

- a) Gas Quality Rule 30 (Southern California Gas Company, [SoCalGas] and San Diego Gas and Electric Company, [SDG&E])
- b) Gas Quality Rule 21 (PG&E)
- c) California Public Utilities Commission (CPUC) General Order 58-A
- d) CARB specifications for Compressed Natural Gas, (CNG) fuel California Code of Regulations (CCR), Title 13, Section 2292.5
- e) Magnitudes of the market (annual gas consumed) to which the specific gas quality standards and/or specifications apply.

Different measurements of gas quality (e.g. chemical composition, heating value (High, Low), Wobbe index, Methane number (How to calculate – two methods), hydrocarbon dew point (HDP), etc.)

Characteristics of the gas imported by pipeline into California from other states and Western Canada.

Characteristics of the gas produced in California

Characteristics of potential new gas supplies imported as liquefied natural gas (LNG)

How California's gas quality specifications compare with other states' specifications

LUNCH 11:30 a.m. – 1 p.m.

1 p.m. Panel 2 — Pipeline System Integrity and Operational Impacts of California Gas Quality Rules

Joe Riviera, SDG&E, SoCalGas Peter Esposito, Lodi Gas Storage Joe Bronner, PG&E Terry Boss, Interstate Natural Gas Association of America

Rules to be addressed in Panel 2:

- Gas Quality Rule 30 (SoCalGas and SDG&E)
- Gas Quality 21 (PG&E)
- CPUC General Order 58-A

2:15 Break

2:30 Panel 3 — Producer and Supplier Perspectives on Gas Quality Issues

Craig Chancellor, Calpine
Tom Umenhofer, CIPA/WSPA
Rue/Liss, Gas Technology Institute
Benedict Ho, BP Exploration
Bill Boyer, Occidental (OXY) Elk Hills
Joe Bronner, PG&E
Lee Stewart, SoCalGas

Topics to be addressed in Panel 3:

In-state producers' options for meeting more restrictive natural gas standards (as defined in the CARB CNG fuel specification)

- In Southern California- CARB CNG specification compared to SoCalGas Rule 30
- In Northern California- CARB CNG specification compared to PG&E Rule 21

Current practices employed by SoCalGas and PG&E to ensure they can redeliver gas from local producers to end-users that meet gas quality requirements

Should the current standards continue to apply to all gas delivered to gas utilities?

Should CARB specifications for CNG fuel continue to apply to all gas delivered to gas utilities?

How much discretion should the utilities have in meeting and applying natural gas quality standards adopted by CPUC and/or the CARB CNG specifications?

Should there be one statewide standard for gas delivered to gas utilities? Should specifications that are tailored to unique and/or small market segments be imposed universally upon:

- All users
- All locations

Public Comment

Adjourn

February 18

9 a.m. Reconvening and Summary of Day One

Richard Meyer, CPUC, Facilitator

9:15 a.m. Panel 4 — Gas Quality Issues affecting Mobile Equipment

Mark Gaines, SDG&E, SoCalGas
Daniel Olson, Colorado State University
Roger Gault, Engine Manufactures Association
James Chiu, Southwest Research Institute
David Rue/William Liss, Gas Technology Institute
Steve Sokolski, BKI

Topics to be addressed by Panel 4:

Why gas quality matters in the Natural Gas Vehicle market:

- Description of the engine inventory
- Light/medium duty vehicle performance
- Heavy duty vehicle performance
- Comparative combustion emissions light/medium duty vehicle performance

Issues regarding CARB Specifications for Compressed Natural Gas as a Motor Vehicle Fuel

 What would be the impact of replacing the current compositional specification with a Methane Number specification?

10:30 Break

10:45 p.m. Panel 5 — Gas Quality Issues Affecting Stationary Equipment

Joe Riviera, SDG&E, SoCalGas
Gas Appliance Manufacturers Association
David Rue/William Liss, GTI
Joe Bronner, PG&E
Chung Liu, South Coast Air Quality Management District
Luis Pando, Southern California Edison Company

Topics to be addressed by Panel 5:

Why gas quality matters: Results of the SoCalGas Emission Impact Study

- Commercial and residential burner tip performance
- Comparative combustion emissions

Based on these results, outstanding Issues regarding:

- Gas Quality Rule 30 (SoCalGas and SDG&E)
- Gas Quality Rule 21 (PG&E)
- CPUC General Order 58-A

12:30 p.m. - LUNCH

1:30 p.m. Panel 6 — LNG Gas Quality Issues

BHP Billiton Edgar Kuiper, Shell Trading Bob Dimitroff, Chevron Kevin Shea, Sempra

Topics to be addressed in Panel 6:

How does the gas quality of potential regasified LNG compare with existing gas supplies currently handled by the California utilities?

What are the potential effects of introducing regasified LNG upon the quality of natural gas flowing through California pipelines? Is it interchangeable?

How should gas quality issues associated with the potential introduction of regasified LNG be addressed?

3:00 p.m. Break

3:15 p.m. Panel 7 Cost Impact on Ratepayers

Joe Bronner, PG&E Rick Morrow, SDG&E

4:15 p.m. Final Public Comment Period

4:30 p.m. Wrap-up and Next Steps

Note: Each presentation will be limited to 10 minutes and there will be a question and answer session immediately following each presentation. A round table discussion will follow each panel.